# Cynomolgus CD59 / CD59A / MAC-IP Protein (His Tag)

Catalog Number: 90188-C08H



# **General Information**

### Gene Name Synonym:

CD59

### **Protein Construction:**

A DNA sequence encoding the cynomolgus CD59 (G7PQF7) (Met1-Glu101) was expressed with a polyhistidine tag at the C-terminus.

Source: Cynomolgus

Expression Host: HEK293 Cells

**QC** Testing

**Purity:** (77.8+20.8) % as determined by SDS-PAGE

**Endotoxin:** 

< 1.0 EU per  $\mu g$  of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70  $^{\circ}$ C

Predicted N terminal: Leu 26

# **Molecular Mass:**

The recombinant cynomolgus CD59 comprises 87 amino acids and has a calculated molecular mass of 10.2 KDa. The apparent molecular mass of it is approximately 18 and 14 KDa respectively in SDS-PAGE.

## Formulation:

Lyophilized from sterile PBS, PH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

# **Usage Guide**

#### Storage:

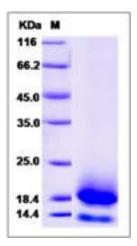
Store it under sterile conditions at  $-20\,^\circ\!\mathrm{C}$  to  $-80\,^\circ\!\mathrm{C}$  upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

# Reconstitution:

Detailed reconstitution instructions are sent along with the products.

#### SDS-PAGE:



# **Protein Description**

CD59 glycoprotein, also known as 20 kDa homologous restriction factor, HRF20, MAC-inhibitory protein, Membrane attack complex inhibition factor, Membrane inhibitor of reactive lysis, MIC11, MIRL and CD59, is a cell membrane protein which contains one UPAR/Ly6 domain. CD59 is a small, highly glycosylated, GPI-linked protein, with a wide expression profile. The soluble form of CD59 from urine retains its specific complement binding activity, but exhibits greatly reduced ability to inhibit MAC assembly on cell membranes. CD59 is a potent inhibitor of the complement membrane attack complex (MAC) action. CD59 was first identified as a regulator of the terminal pathway of complement. It acts by binding to the C8 and/or C9 complements of the assembling MAC, thereby preventing incorporation of the multiple copies of C9 required for complete formation of the osmolytic pore. This inhibitor appears to be species-specific. CD59 is involved in signal transduction for T-cell activation complexed to a protein tyrosine kinase. Defects in CD59 are the cause of CD59 deficiency (CD59D).

## References

1.Fletcher CM. et al., 1994, Structure. 2: 185-99. 2.Rudd PM. et al., 1997, J Biol Chem. 272: 7229-44. 3.Kimberley FC. et al., 2007, Mol Immunol. 44 (1-3): 73-81.

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